

## Air Source Heat Pump Acoustic Assessment

*Prepared for Planning Submission*

This acoustic assessment has been prepared in support of the proposed air source heat pump installation at **35 Beaulieu Road, Amesbury, Salisbury SP4 7PD**. The assessment has been undertaken to demonstrate compliance with: MCS 020 Planning Standard for Permitted Development Professional Advice Note: Planning & Noise for Air Source Heat Pumps (CIEH / IOA, November 2022)

| Project Information            |                                               |
|--------------------------------|-----------------------------------------------|
| Site Address                   | 35 Beaulieu Road, Amesbury, Salisbury SP4 7PD |
| Installer                      | Power Naturally Ltd                           |
| Assessor                       | Adam Pelling                                  |
| Assessment Date                | 16 April 2026                                 |
| Heat Pump Manufacturer         | Daikin                                        |
| Heat Pump Model                | EDLA06E23V3                                   |
| Manufacturer Sound Power Level | 60 dB(A)                                      |

### Assessment Methodology

The assessment has been completed using the methodology contained within the jointly published Chartered Institute of Environmental Health (CIEH) and Institute of Acoustics (IOA) Professional Advice Note “Planning & Noise for Air Source Heat Pumps” (November 2022). The assessment also references the MCS 020 permitted development noise calculation methodology. Manufacturer acoustic data has been referenced from the Daikin Altherma 3 Low Capacity Monobloc technical datasheet.

### Assessment Assumptions

Directivity assumption: 1 reflective surface (Q2) Barrier correction: Type 2 / Partial View screening Assessment positions taken 1 metre from neighbouring habitable room windows Defrost and reverse cycle operation considered within manufacturer sound data assumptions No significant tonal penalty anticipated based on manufacturer performance data Manufacturer stated sound power level for EDLA06EV3: 60 dB(A)

## Assessment Results

| Assessment Position                    | Distance | Predicted Level | Compliance |
|----------------------------------------|----------|-----------------|------------|
| Nearest habitable room window – No. 35 | 9.3 m    | 30.15 dB(A)     | PASS       |
| Nearest habitable room window – No. 37 | 14.8 m   | 26.11 dB(A)     | PASS       |

## Compliance Statement

The calculated sound rating level from the proposed Daikin EDLA06E23V3 air source heat pump does not exceed **35 dB(A)** at the nearest neighbouring noise-sensitive façade when assessed in accordance with the CIEH / IOA Professional Advice Note methodology. The proposed installation also remains below the **37 dB(A)** threshold referenced within the MCS 020 Planning Standard for permitted development. Based on the assessment undertaken, the proposed installation is considered acoustically acceptable and compliant with the applicable planning and environmental health guidance.

## Appendix A – Manufacturer Datasheet

The attached Daikin technical datasheet includes the manufacturer-declared acoustic data for the Daikin Altherma 3 Low Capacity Monobloc range, including the EDLA06EV3 model referenced within this assessment.

### Prepared by:

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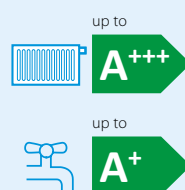


# Daikin Altherma 3 Low Capacity Monobloc

(4-6-8 class)



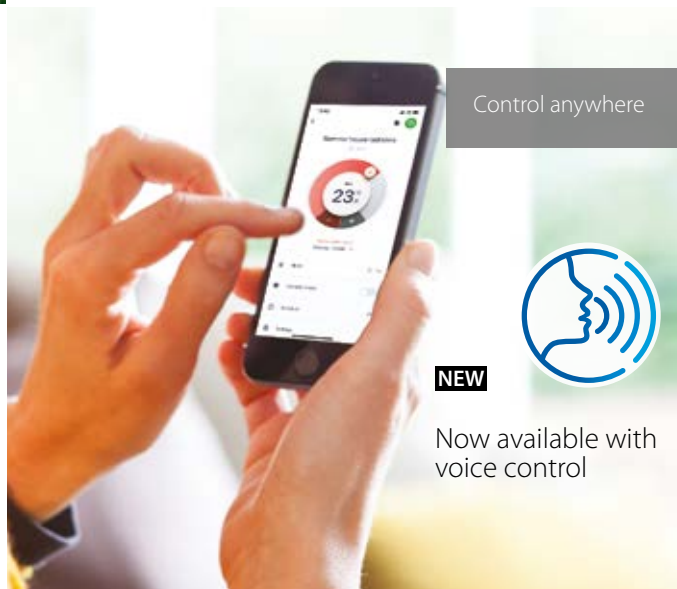
Setting the new Monobloc standard



E(B/D)LA04-08EV3



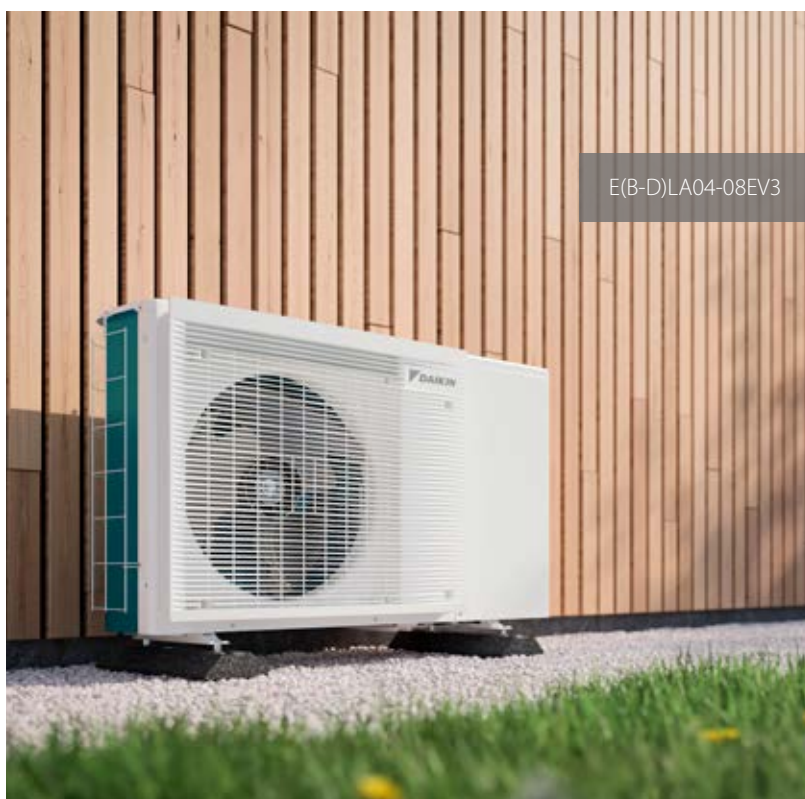
E(B-D)LA04-08EV3



Control anywhere

**NEW**

Now available with  
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E(B-D)LA04-08EV3

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# Daikin Altherma 3 Low Capacity Monobloc

4-6-8 class

## Functional design

Now available in 4, 6 and 8 class Daikin Altherma 3 Low Capacity Monobloc is Daikin's first third generation monobloc, benefitting from a new design and using R32 refrigerant, which has a low Global Warming Potential (GWP).

### A redesigned casing

The white front grille with horizontal lines hides the fan from view, reducing the perception of the sound produced by the unit.

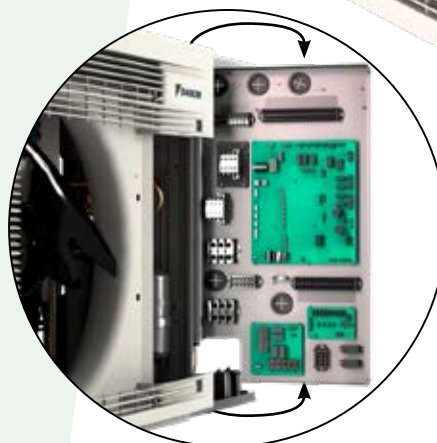
The light ivory, seamless casing reflects the environment in which the unit is installed, helping it to blend in with its surroundings.

### A renewed fan shape

The shape of the fan has been reviewed to reduce the contact surface with air and improve air circulation.

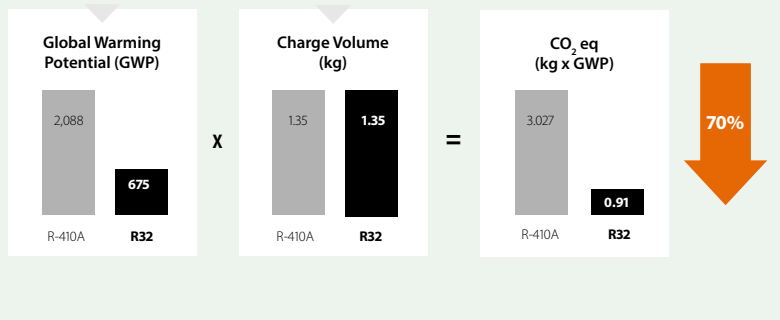
### Easy installation and commissioning

- › The rotary switchbox is a brand-new feature in this monobloc heat pump.
- › It helps installers access the hydraulic and refrigerant components in an easy way.
- › Commissioning and servicing can be then performed with ease.





Reduced environmental impact: 70% less CO<sub>2</sub> equivalent  
 › GWP: R-410A: 2,088 > R32: 675



## R32 monobloc R-32

Daikin is a pioneer in developing heat pumps equipped with R32. With a lower GWP, R32 is equivalent in power to standard refrigerants, but achieves higher energy efficiency and lower CO<sub>2</sub> emissions. Easy to recover and reuse, R32 is the perfect solution for attaining CO<sub>2</sub> emission reduction targets.

## A simple solution to space limitation

Thanks to the monobloc set-up, besides a DHW tanks no indoor unit is required which helps when space is limited inside. The monobloc can fit under a window.

All the hydraulic components are integrated in one unit, including the sealed refrigerant circuit, so there's no need for refrigerant handling or F-gas qualifications.

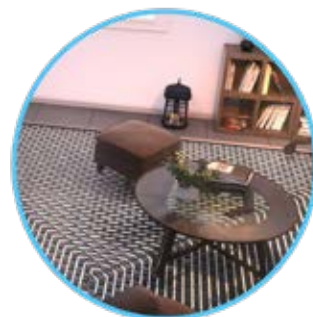


## Fully connected control

The Daikin Altherma 3 Low Capacity Monobloc is equipped with the most intuitive control solutions.

## Heating and cooling emitters

Daikin Altherma 3 Low Capacity Monobloc works perfectly with various emitters, including fan coils, radiators, underfloor heating and heat pump convectors.



## Onecta app, with voice control

- › Add value by setting up Onecta for your customer - quick to connect using your own installer account.
- › Let customers control their heating from home or remotely via smartphone.
- › Enable voice control for easy, hands-free operation.
- › Works with Google Assistant and Amazon Alexa.
- › Complements the MMI/Madoka controller – access both in one app.
- › Includes scheduling, holiday and boost modes, multiple unit control and energy monitoring.

## Madoka: a user-friendly wired room thermostat

- › Sleek and elegant design
- › Intuitive touch button control
- › Three colours to match any interior (white, black and silver-grey)
- › Compact unit measuring only 85 x 85 mm

## Domestic hot water production

The Monobloc combines with stainless steel tanks (EKHWS-D), Daikin R32 Pre Plumbed Cylinder (UK.PPC/R32SS), thermal stores and panels (EKHWP) to provide domestic hot water quickly.



### ✓ Man Machine Interface (MMI) or User Interface

Inspired by the award-winning design of the Daikin Altherma 3 indoor units, Daikin also upgraded this controller to deliver an even more user-friendly interface.



### Quick configuration

After logging in, you'll be able to configure the unit with the new controller in less than 10 steps. You can even check if the unit is ready to use by running test cycles.

### Easy operation

The new interface features a few buttons and two navigational knobs to help you quickly set the room temperature and control units.

### User-friendly design

The interface features an intuitive design. The high contrasted colour screen delivers stunning and practical visuals for both installers and service engineers.

### WLAN cartridge connection

Install the BRP069A78 WLAN adaptor in the MMI will make the heat pump wi-fi enabled. You can then connect the heat pump to ONECTA for smart phone control.

### Small dimensions for a discreet unit:

136 x 160 x 37 mm (HxWxD)



# Consistently compact

Daikin Altherma 3 Low Capacity Monobloc is the most compact heat pump solution, as it consists of only one outdoor unit, so it's ideal for homes with limited space.

## ✓ Strengthened performances

The Daikin Altherma 3 Low Capacity Monobloc shows improved performances as well as a wide product range.

- › Space heating up to **A+++**
- › Domestic hot water up to **A+**
- › Operating down to -25°C
- › Delivers LWT 55°C at -15°C without back-up heater

## ✓ Flexibility in domestic hot water production

Combines with:

- › Stainless steel domestic hot water tank (EKHWS(U)-D)
- › Thermal store EKHWP-(P)B to provide domestic hot water with support from the sun
- › Daikin R32 Pre Plumbed Cylinder range UK.PPC/R32



### ✓ Extended product range

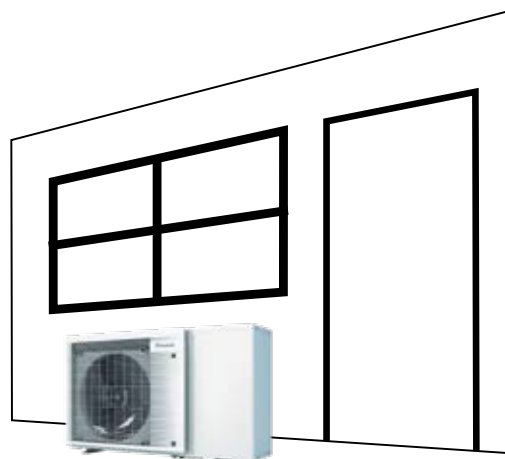
- › Heating only models (EDLA\*)
- › Reversible models providing cooling (EBLA\*)
- › One-phase models only
- › Back-up heater less models (EB/DLA-EV3)
- › Available in 4, 6 and 8 class
- › Completing the existing range of 9, 11, 14 and 16 class

### ✓ Perfect match with any heat emitters

Combines with:

- › Underfloor heating applications
- › Traditional radiators
- › Heat pump convectors such as Daikin Altherma HPCs

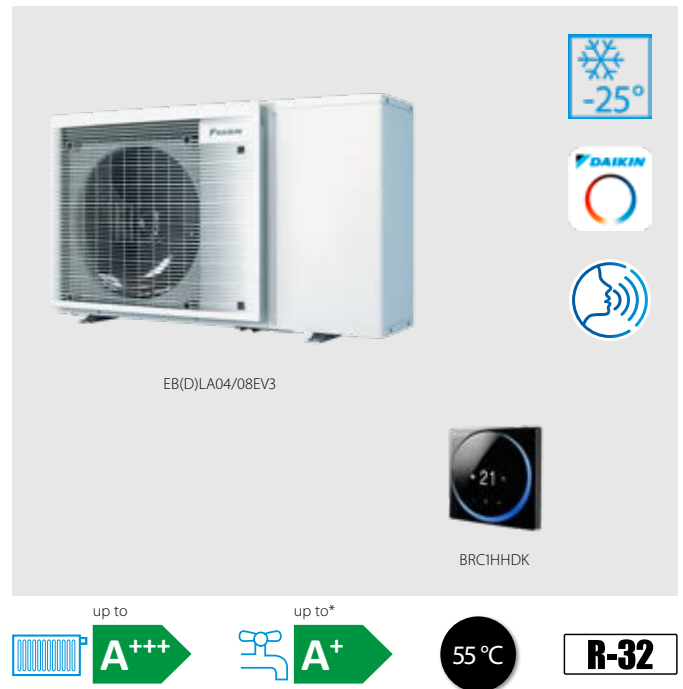
### ✓ Fits under a window



# Daikin Altherma 3 M

This high performance air-to-water Monobloc system is available in **heating only (EDLA)** and **reversible heating and cooling, (EBLA)** models - both are ideal for homes with limited indoor space.

- › WLAN adaptor included in box, requires inserting into MMI
- › Possible to combine with domestic hot water tanks
- › Heating only air-to-water heat pump
- › Monobloc all-in-one concept including all hydraulic parts
- › Optional plug & play integrated 3 kW electric back-up heater
- › Available in one phase



| Outdoor Unit                        |                                      |            | EDLA04EV3                         | EDLA06EV3                         | EDLA08EV3                         | EBLA04EV3                         | EBLA06EV3                         | EBLA08EV3                         |
|-------------------------------------|--------------------------------------|------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Description                         |                                      |            | Class 4                           | Class 6                           | Class 8                           | Class 4                           | Class 6                           | Class 8                           |
| Function                            |                                      |            | Heating Only                      | Heating Only                      | Heating Only                      | Reversible                        | Reversible                        | Reversible                        |
| Dimensions <sup>[3]</sup>           | Height x Width x Depth               | mm         | 770 x 1250 x 362                  | 770 x 1250 x 362                  | 770 x 1250 x 362                  | 770 x 1250 x 362                  | 770 x 1250 x 362                  | 770 x 1250 x 362                  |
| Weight                              |                                      | kg         | 88                                | 88                                | 88                                | 88                                | 88                                | 88                                |
| Nominal capacity                    | Heating <sup>[1/2]</sup>             | kW         | 4.30/4.60                         | 6.00/5.90                         | 7.50/7.80                         | -                                 | -                                 | -                                 |
|                                     | Cooling <sup>[1/2]</sup>             | kW         | -                                 | -                                 | -                                 | 4.86/4.52                         | 5.83/5.09                         | 6.18/5.44                         |
| Nominal input                       | Heating/Cooling <sup>[1/2]</sup>     | kW         | 0.840/1.26                        | 1.24/1.69                         | 1.63/2.23                         | 0.820/1.36                        | 1.08/1.55                         | 1.19/1.73                         |
|                                     | Heating <sup>[1/2]</sup>             | kW         | 5.10/3.65                         | 4.85/3.50                         | 4.60/3.50                         | -                                 | -                                 | -                                 |
| COP                                 | Heating <sup>[1/2]</sup>             |            | 5.10/3.65                         | 4.85/3.50                         | 4.60/3.50                         | 5.91/3.32                         | 5.40/3.28                         | 5.19/3.14                         |
|                                     | Cooling <sup>[1/2]</sup>             |            | -                                 | -                                 | -                                 | -                                 | -                                 | -                                 |
| Seasonal space heating efficiency   | Space heating (Average climate) 35°C | Class      | A+++                              | A+++                              | A+++                              | A+++                              | A+++                              | A+++                              |
|                                     |                                      | Efficiency | 176                               | 176                               | 179                               | 176                               | 176                               | 179                               |
|                                     |                                      | SCOP       | 4.48                              | 4.47                              | 4.56                              | 4.48                              | 4.47                              | 4.56                              |
|                                     | Space heating (Average climate) 55°C | Class      | A++                               | A++                               | A++                               | A++                               | A++                               | A++                               |
|                                     |                                      | Efficiency | 127                               | 127                               | 130                               | 127                               | 127                               | 130                               |
|                                     |                                      | SCOP       | 3.26                              | 3.26                              | 3.32                              | 3.26                              | 3.26                              | 3.32                              |
| Operation range                     | Heating                              | °C         | -25 ~ 35                          | -25 ~ 35                          | -25 ~ 35                          | -                                 | -                                 | -                                 |
|                                     | Cooling                              | °C         | -                                 | -                                 | -                                 | 10 ~ 43                           | 10 ~ 43                           | 10 ~ 43                           |
|                                     | Hot water                            | °C         | -25 ~ 35                          | -25 ~ 35                          | -25 ~ 35                          | -25 ~ 35                          | -25 ~ 35                          | -25 ~ 35                          |
| Sound power level                   | Heating/Cooling                      | dBA        | 58                                | 60                                | 62                                | 61                                | 62                                | 62                                |
| Sound pressure level <sup>[4]</sup> | Heating/Cooling                      | dBA        | 44                                | 47                                | 49                                | 48                                | 49                                | 50                                |
| Refrigerant charge (factory)        | R-32                                 | kg         | 1.35                              | 1.35                              | 1.35                              | 1.35                              | 1.35                              | 1.35                              |
| Power supply                        |                                      |            | 1-phase/230V/50Hz                 | 1-phase/230V/50Hz                 | 1-phase/230V/50Hz                 | 1-phase/230V/50Hz                 | 1-phase/230V/50Hz                 | 1-phase/230V/50Hz                 |
| Recommended fuses                   | Max Running Current                  | A          | 19.90                             | 19.90                             | 24.00                             | 19.90                             | 19.90                             | 24.00                             |
|                                     | Recommended Fuse                     | A          | 20                                | 20                                | 25                                | 20                                | 20                                | 25                                |
| Pump                                | No. of speeds                        |            | Inverter controller               | Inverter controller               | Inverter controller               | Inverter controller               | Inverter controller               | Inverter controller               |
| Expansion vessel volume             |                                      | litres     | 7                                 | 7                                 | 7                                 | 7                                 | 7                                 | 7                                 |
| Water connections (diameter)        |                                      | inch       | 1" (male)                         | 1" (male)                         | 1" (male)                         | 1" (male)                         | 1" (male)                         | 1" (male)                         |
| Minimum flow rate                   | Cooling                              | l/min      | -                                 | -                                 | -                                 | 10                                | 10                                | 10                                |
|                                     | Heating (incl. Defrost)              | l/min      | 12                                | 12                                | 12                                | 12                                | 12                                | 12                                |
|                                     | Hot water                            | l/min      | 25                                | 25                                | 25                                | 25                                | 25                                | 25                                |
| Maximum piping distance to tank     |                                      | m          | 10                                | 10                                | 10                                | 10                                | 10                                | 10                                |
| Maximum level difference            |                                      | m          | 5                                 | 5                                 | 5                                 | 5                                 | 5                                 | 5                                 |
| SAP ID                              | 58°C / 55°C / 45°C / 35°C            |            | 107684 / 107681 / 107682 / 107683 | 107700 / 107697 / 107698 / 107699 | 107716 / 107713 / 107714 / 107715 | 107692 / 107689 / 107690 / 107691 | 107708 / 107705 / 107706 / 107707 | 107724 / 107721 / 107722 / 107723 |

| BACK UP HEATER KIT (OPTIONAL) |                               |      |                                                          |
|-------------------------------|-------------------------------|------|----------------------------------------------------------|
| Description                   |                               |      | EKLBUHCB6W1<br>Back up heater kit (3kW) <sup>[vii]</sup> |
| Nominal rating                |                               | kW   | 3                                                        |
| Dimensions                    | Depth                         | mm   | 210                                                      |
|                               | Width                         | mm   | 250                                                      |
|                               | Height                        | mm   | 560                                                      |
| Power supply                  |                               |      | 1-phase / 230V / 50Hz                                    |
| Recommended fuse              | 3kW 1ph 230V <sup>[vii]</sup> | Amps | 16                                                       |
| Water connections             | Diameter                      | inch | 1" (male)                                                |

Nominal capacity and nominal input tested according to EN 14511 at the following conditions:

Heating 1 : Ambient air temperature 7°C and leaving water temperature 35°C (A7 W35) Heating 2 : Ambient air temperature 7°C and leaving water temperature 45°C (A7 W45)

Cooling 1 : Ambient air temperature 35°C and leaving water temperature 18°C (A35 W18) Cooling 2 : Ambient air temperature 35°C and leaving water temperature 7°C (A35 W7)

[3] Includes aesthetic grille [4] Sound pressure level measured at 1m from the unit

## Notes:

- User interface (MMI) is supplied with outdoor unit
- EKFLSW2 must be ordered if glycol is present within the system
- Only one optional remote sensor can be installed
- For compatible cylinders, see page 31
- \*\*Recommended to achieve minimum outdoor unit and antifreeze valve ground clearance of 150mm
- SD Card BRP069A78 is supplied as standard. This option will only be required in case of bad connectivity in location of the user interface
- Back up heater kit EKLBUHCB6W1 can also be configured for 3kW or 6kW, 1ph or 3ph. See monobloc installation manual for more details

## Daikin Altherma R32 Monobloc Wiring Centre (optional):

| DAIKIN ALTHERMA R-32 MONOBLOC WIRING CENTRE (OPTIONAL) |               |    |               |
|--------------------------------------------------------|---------------|----|---------------|
|                                                        |               |    | UK.MONOR32/WC |
| Description                                            | Wiring centre |    |               |
| To use with                                            | EDLA09~16D    |    |               |
| Fuse (DHW Booster Heater)                              | Amps          |    | 16            |
| Dimensions (Wiring Centre)                             | Depth         | mm | 107           |
|                                                        | Width         | mm | 241           |
|                                                        | Height        | mm | 194           |
| Dimensions (PCB for Outdoor)                           | Depth         | mm | 60            |
|                                                        | Width         | mm | 120           |
|                                                        | Height        | mm | 120           |

Note:

i. Wiring centre also compatible with the low capacity monobloc range (EB/DLA04~08EV3)

ii. Wiring centre not compatible with Pre-Plumbed Cylinder

## Accessories:

| Accessory Ref   | Description                                                                                                                                                                                      |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UK.MONOR32/WC   | Daikin Altherma R-32 Monobloc Wiring Centre                                                                                                                                                      |
| BRC1HHDW        | Madoka Heating - White                                                                                                                                                                           |
| BRC1HHDS        | Madoka Heating - Silver                                                                                                                                                                          |
| BRC1HHDK        | Madoka Heating - Black                                                                                                                                                                           |
| BRP069A78       | Daikin ONECTA App WLAN SD Card (See note)                                                                                                                                                        |
| BRP069A71       | Daikin ONECTA App (See note)                                                                                                                                                                     |
| EKRELSG         | Smart grid relay kit (high voltage)                                                                                                                                                              |
| EKPCCAB4        | PC cable – to upload field settings from PC to unit                                                                                                                                              |
| UK.AFVALVE2/JKT | Anti-freeze valve pack with compression fittings & jackets (pack contains 2 valves)                                                                                                              |
| AFVALVE1        | Anti-freeze valve for glycol free systems (two required per heat pump)                                                                                                                           |
| EKFLSW1         | Optional flow switch (See note)                                                                                                                                                                  |
| EKRSC1          | Optional remote temperature sensor for outdoor unit (See note)                                                                                                                                   |
| KRCS01-1        | Optional remote temperature sensor for indoor unit (See note)                                                                                                                                    |
| EKRP1HBA        | Optional PCB kit for remote alarm monitoring, fault indication, solar interlock and bivalent operation                                                                                           |
| EKRP1AHT        | Optional PCB kit for demand control, power consumption control and power limitation                                                                                                              |
| UK.FF600S1503   | Three flexi-feet, height 150mm, to mount the outdoor unit                                                                                                                                        |
| UK.CWBXXL3A-B   | Wall bracket for outdoor unit (250kg, 780mm long, 3 arms, black)                                                                                                                                 |
| UK.DT4          | Condensate drip tray (1420 x 500 x 50mm)                                                                                                                                                         |
| UK.DTFB3        | Floor bracket kit to mount drip tray for 3 flexi feet or wall bracket                                                                                                                            |
| K.HOSE750       | Pair of flexible hoses                                                                                                                                                                           |
| K.HOSE750EL     | Pair of flexible hoses with elbow                                                                                                                                                                |
| UK.HOSE300EL    | Pair of flexible hoses with elbow (Length 300mm, 19mm tough PVC coat insulation, 1" FBSP, 28mm compression)                                                                                      |
| UK.CG-750S-INV  | Outdoor Unit Guard for EB/DLA-E (4-6-8) Monobloc                                                                                                                                                 |
| K.FERNOXTF1     | Fernox magnetic filter 1"                                                                                                                                                                        |
| K.FERNOXTF1FL   | Fernox magnetic filter 1" and F1 inhibitor fluid (500ml)                                                                                                                                         |
| EKEPRHLT5H      | Thermal store (500l) connection kit – For heating only models (for R-32 H HT, H-Split, Ref Split and Monobloc)                                                                                   |
| EKEPRHLT5X      | Thermal store (500l) connecting kit – For reversible models (for R-32 H HT, H-Split, Ref Split and Monobloc)                                                                                     |
| EKEPRHLT3HX     | Thermal store (300l) connection kit – For heating only and reversible models (for R-32 H HT, H-Split, Ref Split and Monobloc)                                                                    |
| EKUMBPART       | Third party tank connection kit - Dry pocket sensor                                                                                                                                              |
| K.ELECMETV      | <b>Electric meter for domestic RHI - Single-phase (Metering for performance compliant)</b><br>MID Class A electric meter to measure the electricity consumption of the Daikin Altherma heat pump |

# Thermal stores and tanks

## Hot water heating installation options

### Energy-efficient hot water storage

Our high performance cylinders and thermal stores are designed to meet the demand for the domestic hot water across a range of applications. With low heat losses and large coil areas, Daikin hot water cylinders are manufactured in consideration of all the requirements which come with our modern lifestyles.

With so many different designs and shapes to choose from, our customers can have complete peace of mind knowing they can select a cylinder that will meet all their project specifications.

All our cylinders are WRAS approved, with most of them having ErP ratings of B. When choosing our cylinders, you can rest assured that these products provide high efficiency with minimum heat loss and therefore help to protect the environment.

All our indirectly heated unvented cylinders and thermal stores come with a promise to deliver a high quality, reliable performance..

#### ✓ Pre-plumbed R32 cylinder

##### The perfect partner to a Daikin Altherma Monobloc

- › Available in 150, 180, 210, 250 and 300 litres in stainless steel UK/PPC/R32SS and slimline version in 150 and 180 litres.
- › Compatible with heating only models

##### Efficiency

- › High-quality insulation keeps heat loss to a minimum
- › With on-board pump and 20 litre buffer vessel, these pre-plumbed cylinders can also be used as a hydraulic separation between the primary and secondary circuits.
- › Plug & play installation, all key hydraulics included to ensure a fast and easy installation

##### Reliability

- › Built-in 50 litre buffer vessel (25L slimline), which can also be used as hydraulic separation and pre-fitted pump and magnetic filter to ensure the best performance from the Daikin Altherma Monobloc



## ✓ Domestic hot water tank

### Stainless steel domestic hot water tank

- › Available in 150, 180, 200, 250 and 300 litres in stainless steel EKHWS(U)-D

### Efficiency

- › High-quality insulation keeps heat loss to a minimum
- › Efficient temperature heating: from 10°C to 50°C in only 60 minutes
- › Available as an integrated solution or separate tank

### Reliability

- › At necessary intervals, the unit can heat up water up to 60°C to prevent the risk of bacteria growth



## ✓ Thermal store range

### Thermal store: additional hot water comfort

Combine your heat pump with a thermal store to achieve the ultimate comfort at home.

- › Fresh water principle: receive domestic hot water on demand while eliminating the risk of contamination and sedimentation
- › Optimal domestic hot water performance: the low temperature evolution enables high tapping performance
- › Fit for the future: possibility to integrate with renewable solar energy and other heat sources, e.g. fireplace
- › Lightweight and robust build of the unit combined with the cascade principle offers flexible installation options

Built for both small and large homes, customers can choose between a pressureless and a pressurised hot water system.

### Efficiency

- › Fit for the future: maximise renewable energy sources
- › Intelligent Heat Storage Management: ensures continuous heating during defrost mode, and uses stored heat for space heating
- › High-quality insulation keeps heat loss to a minimum

### Reliability

- › Maintenance-free tank: no corrosion, anode, scale or lime deposits, and no water loss through the safety valve



# Pre-Plumbed R32 Cylinder



| Domestic hot water cylinder                  |                      |    | UK.PPC150/R32SS                            | UK.PPC180/R32SS           | UK.PPC210/R32SS           | UK.PPC250/R32SS           | UK.PPC300/R32SS           |
|----------------------------------------------|----------------------|----|--------------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Description                                  |                      |    | 150l pre-plumbed cylinder                  | 180l pre-plumbed cylinder | 210l pre-plumbed cylinder | 250l pre-plumbed cylinder | 300l pre-plumbed cylinder |
| Suitable for                                 |                      |    | Daikin Altherma R-32 Monobloc Heating only |                           |                           |                           |                           |
| Energy efficiency class                      |                      |    | B                                          | B                         | C                         | C                         | C                         |
| Standing heat loss (ErP)W                    |                      |    | 54                                         | 58                        | 63                        | 88                        | 96                        |
| Standing heat loss kWh/24h                   |                      |    | 1.29                                       | 1.39                      | 1.50                      | 2.10                      | 2.29                      |
| Storage volume litres                        |                      |    | 148                                        | 179                       | 209                       | 248                       | 301                       |
| Buffer vessel volume litres                  |                      |    | 50                                         | 50                        | 50                        | 50                        | 50                        |
| Max water temperature °C                     |                      |    | 90                                         | 90                        | 90                        | 90                        | 90                        |
| Pump                                         | Quantity             |    | 1                                          | 1                         | 1                         | 1                         | 1                         |
|                                              | Nr of Speeds         |    | PWM                                        | PWM                       | PWM                       | PWM                       | PWM                       |
|                                              | Nominal ESP kPa      |    | 80                                         | 80                        | 80                        | 80                        | 80                        |
|                                              | Power Input W        |    | 52                                         | 52                        | 52                        | 52                        | 52                        |
| Primary immersion heater capacity kW         |                      |    | 3                                          | 3                         | 3                         | 3                         | 3                         |
| Primary immersion heater power supply        |                      |    | 1-phase / 230V / 50Hz                      | 1-phase / 230V / 50Hz     | 1-phase / 230V / 50Hz     | 1-phase / 230V / 50Hz     | 1-phase / 230V / 50Hz     |
| Primary immersion heater recommended fuses A |                      |    | 16                                         | 16                        | 16                        | 16                        | 16                        |
| Height mm                                    |                      |    | 1420                                       | 1545                      | 1735                      | 2020                      | 2020                      |
| Diameter mm                                  |                      |    | 550                                        | 550                       | 550                       | 550                       | 600                       |
| Empty weight kg                              |                      |    | 48                                         | 58                        | 61                        | 73                        | 88                        |
| Material inside cylinder                     |                      |    | Stainless steel 2304                       |                           |                           |                           |                           |
| Piping connections (diameter)                | Water inlet H/E      | mm | 28                                         | 28                        | 28                        | 28                        | 28                        |
|                                              | Water outlet H/E     | mm | 28                                         | 28                        | 28                        | 28                        | 28                        |
|                                              | Cold water in        | mm | 22                                         | 22                        | 22                        | 22                        | 22                        |
|                                              | Hot water out        | mm | 22                                         | 22                        | 22                        | 22                        | 22                        |
|                                              | Space heating flow   | mm | 28                                         | 28                        | 28                        | 28                        | 28                        |
|                                              | Space heating return | mm | 28                                         | 28                        | 28                        | 28                        | 28                        |

| Domestic hot water cylinder                |                      |         | UK.PPC150SL/R32SS                          |  | UK.PPC180SL/R32SS                  |  |
|--------------------------------------------|----------------------|---------|--------------------------------------------|--|------------------------------------|--|
| Description                                |                      |         | 150l slimline pre-plumbed cylinder         |  | 180l slimline pre-plumbed cylinder |  |
| Suitable for                               |                      |         | Daikin Altherma R-32 Monobloc Heating only |  |                                    |  |
| Energy efficiency class                    |                      |         | B                                          |  | B                                  |  |
| Standing heat loss (ErP)                   |                      | W       | 52                                         |  | 58                                 |  |
| Standing heat loss                         |                      | kWh/24h | 1.23                                       |  | 1.39                               |  |
| Storage volume                             |                      | litres  | 152                                        |  | 178                                |  |
| Buffer vessel volume                       |                      | litres  | 25                                         |  | 25                                 |  |
| Max water temperature                      |                      | °C      | 90                                         |  | 90                                 |  |
| Pump                                       | Quantity             |         | 1                                          |  | 1                                  |  |
|                                            | Nr of Speeds         |         | PWM                                        |  | PWM                                |  |
|                                            | Nominal ESP          | kPa     | 80                                         |  | 80                                 |  |
|                                            | Power Input          | W       | 52                                         |  | 52                                 |  |
| Primary immersion heater capacity          |                      | kW      | 3                                          |  | 3                                  |  |
| Primary immersion heater power supply      |                      |         | 1-phase / 230V / 50Hz                      |  | 1-phase / 230V / 50Hz              |  |
| Primary immersion heater recommended fuses |                      | A       | 16                                         |  | 16                                 |  |
| Height                                     |                      | mm      | 1869                                       |  | 1990                               |  |
| Diameter                                   |                      | mm      | 475                                        |  | 475                                |  |
| Empty weight                               |                      | kg      | 61                                         |  | 69                                 |  |
| Material inside cylinder                   |                      |         | Stainless steel 2304                       |  | Stainless steel 2304               |  |
| Piping connections (diameter)              | Water inlet H/E      | mm      | 28                                         |  | 28                                 |  |
|                                            | Water outlet H/E     | mm      | 28                                         |  | 28                                 |  |
|                                            | Cold water in        | mm      | 22                                         |  | 22                                 |  |
|                                            | Hot water out        | mm      | 22                                         |  | 22                                 |  |
|                                            | Space heating flow   | mm      | 28                                         |  | 28                                 |  |
|                                            | Space heating return | mm      | 28                                         |  | 28                                 |  |

## Features:

- › Plug & play installation, all key hydraulics included to ensure a fast and easy installation
- › The perfect partner to the Daikin Altherma Monobloc, heating only models
- › Available with the wiring box for separate connections and local power supply for the immersion heater
- › With on board pump and 20L buffer vessel, these pre plumbed cylinders can also be used as a hydraulic separation between the primary and secondary circuits.
- › Optimise floor space, our slimline model has a small footprint, making it ideal for smaller properties
- › Maximum performance, built-in 20 litre buffer vessel, which can also be used as hydraulic separation and pre-fitted pump and magnetic filter to ensure the best performance from the Daikin Altherma Monobloc
- › Pre-fitted with 20 litre buffer vessel / hydraulic separator, G3 kit (expansion vessel supplied loose), wiring box, diverter valve, on board pump, magnetic filter, automatic air vents and immersion heater.

# Hot Water Cylinder



| Domestic hot water cylinder   |                  |      | SB.EKHWSU150/EKEXP                          | SB.EKHWSU180/EKEXP                          | SB.EKHWSU200/EKEXP                          | SB.EKHWSU250/EKEXP                          | SB.EKHWSU300/EKEXP                          |
|-------------------------------|------------------|------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|
| Description                   |                  |      | 150L unvented cylinder (Including EKEXPVES) | 180L unvented cylinder (Including EKEXPVES) | 200L unvented cylinder (Including EKEXPVES) | 250L unvented cylinder (Including EKEXPVES) | 300L unvented cylinder (Including EKEXPVES) |
| Suitable for                  |                  |      | R-32 Split and Monobloc systems             |                                             |                                             |                                             |                                             |
| Energy efficiency class       |                  |      | B                                           | B                                           | B                                           | B                                           | B                                           |
| Standing heat loss (ErP)      |                  |      | W                                           | 45                                          | 50                                          | 55                                          | 60                                          |
| Storage volume                |                  |      | litres                                      | 145                                         | 174                                         | 192                                         | 242                                         |
| Standing heat loss            |                  |      | kWh/24h                                     | 1.1                                         | 1.2                                         | 1.3                                         | 1.4                                         |
| Max water temperature         |                  |      | °C                                          | 75                                          | 75                                          | 75                                          | 75                                          |
| Booster heater capacity       |                  |      | kW                                          | 3                                           | 3                                           | 3                                           | 3                                           |
| Power supply                  |                  |      |                                             | 1-phase / 230V / 50Hz                       | 1-phase / 230V / 50Hz                       | 1-phase / 230V / 50Hz                       | 1-phase / 230V / 50Hz                       |
| Recommended fuses             |                  |      | A                                           | 20                                          | 20                                          | 20                                          | 20                                          |
| Height                        |                  |      | mm                                          | 1015                                        | 1175                                        | 1283                                        | 1553                                        |
| Diameter                      |                  |      | mm                                          | 595                                         | 595                                         | 595                                         | 595                                         |
| Empty weight                  |                  |      | kg                                          | 45                                          | 50                                          | 53                                          | 58                                          |
| Material inside cylinder      |                  |      |                                             | Stainless steel (EN 1.4521)                 | Stainless steel (EN 1.4521)                 | Stainless steel (EN 1.4521)                 | Stainless steel (EN 1.4521)                 |
| Piping connections (diameter) | Water inlet H/E  | inch | 3/4 " (female)                              | 3/4 " (female)                              | 3/4 " (female)                              | 3/4 " (female)                              | 3/4 " (female)                              |
|                               | Water outlet H/E | inch | 3/4 " (female)                              | 3/4 " (female)                              | 3/4 " (female)                              | 3/4 " (female)                              | 3/4 " (female)                              |
|                               | Cold water in    | inch | 3/4 " (female)                              | 3/4 " (female)                              | 3/4 " (female)                              | 3/4 " (female)                              | 3/4 " (female)                              |
|                               | Hot water out    | inch | 3/4 " (female)                              | 3/4 " (female)                              | 3/4 " (female)                              | 3/4 " (female)                              | 3/4 " (female)                              |

## Features:

- This stainless steel unvented cylinder is the ideal partner for Daikin Altherma R-32 Split and Low temperature monobloc systems
  - Fitted with a 3kW immersion heater as standard
  - Quick and easy installation with semi pre-plumbed G3 safety kit included
  - Supplied with 3-way valve
- EKHWP-PB

# Thermal Store

| Thermal Store                       |                                                           |         | EKHWP300PB                                                  | EKHWP500PB                                                  |
|-------------------------------------|-----------------------------------------------------------|---------|-------------------------------------------------------------|-------------------------------------------------------------|
| Description                         |                                                           |         | Thermal Store 300 litre (compatible with pressurised solar) | Thermal Store 500 litre (compatible with pressurised solar) |
| Dimensions                          | Height x Width x Depth                                    | mm      | 1650 x 595 x 615                                            | 1660 x 790 x 790                                            |
| Weight                              |                                                           | kg      | 58                                                          | 89                                                          |
| Energy efficiency class             |                                                           |         | B                                                           | B                                                           |
| Standing heat loss (ErP)            |                                                           |         | 64                                                          | 72                                                          |
| Water volume                        |                                                           | litres  | 294                                                         | 477                                                         |
| Max. water temperature              |                                                           | °C      | 85                                                          | 85                                                          |
| Insulation <sup>[1]</sup>           |                                                           | kWh/24h | 1.5                                                         | 1.7                                                         |
| Heat Exchanger (Heat Source)        | Material                                                  |         | Stainless Steel (DIN1.4404)                                 | Stainless Steel (DIN1.4404)                                 |
|                                     | Surface Area                                              | m²      | 2.7                                                         | 3.8                                                         |
|                                     | Internal coil volume                                      | litres  | 13.2                                                        | 19                                                          |
| Heat Exchanger (Domestic hot water) | Material                                                  |         | Stainless Steel (DIN1.4404)                                 | Stainless Steel (DIN1.4404)                                 |
|                                     | Surface Area                                              | m²      | 5.6                                                         | 5.8                                                         |
|                                     | Internal coil volume                                      | litres  | 27.1                                                        | 29.0                                                        |
| Heat Exchanger (Pressurised Solar)  | Material                                                  |         | Stainless Steel (DIN1.4404)                                 | Stainless Steel (DIN1.4404)                                 |
|                                     | Surface Area                                              | m²      | 0.8                                                         | 1.7                                                         |
|                                     | Internal coil volume                                      | litres  | 4.2                                                         | 12.5                                                        |
| Thermal Performance                 | Hot water volume without reheating at draw-off rate 12l/m | litres  | 153 <sup>[2]</sup>                                          | 282 <sup>[2]</sup>                                          |
|                                     |                                                           |         | 252 <sup>[3]</sup>                                          | 240 <sup>[3]</sup>                                          |
|                                     |                                                           |         | 321 <sup>[4]</sup>                                          | 444 <sup>[4]</sup>                                          |
|                                     | Hot water volume without reheating at draw-off rate 8l/m  | litres  | 284 <sup>[2]</sup>                                          | 324 <sup>[2]</sup>                                          |
|                                     |                                                           |         | 283 <sup>[3]</sup>                                          | 288 <sup>[3]</sup>                                          |
| Piping connections (diameter)       | Heat source in/out                                        | inch    | G 1" (female) / 1" (male)                                   | G 1" (female) / 1" (male)                                   |
|                                     | Potable water in/out                                      | inch    | G 1" (female) / 1" (male)                                   | G 1" (female) / 1" (male)                                   |
|                                     | Pressurised solar in/out                                  | inch    | G 3/4" (female) / 1" (male)                                 | G 3/4" (female) / 1" (male)                                 |

[1] Heat loss according to EN12897 and EN 15332

[2] Inlet temperature = 10°C / Tapping temperature = 40°C / Storage temperature = 50°C

[3] Inlet temperature = 10°C / Tapping temperature = 40°C / Storage temperature = 60°C

[4] Inlet temperature = 10°C / Tapping temperature = 40°C / Storage temperature = 65°C



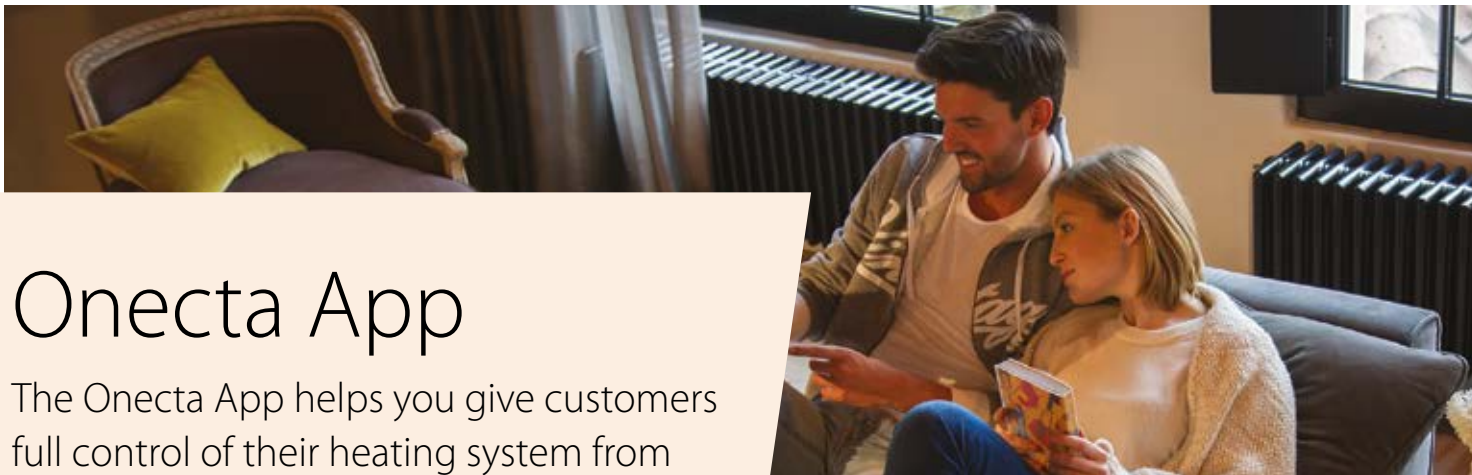
## Features:

- This hot water thermal storage tank provides instantaneous hot water and serves as a heat storage medium
- Tank designed for connection with pressurised thermal solar system
- Tank designed for connection with drainback thermal solar system
- Available in 300 and 500 litres
- Large hot water storage tank to provide domestic hot water at any time
- Heat loss is reduced to a minimum thanks to the high quality insulation
- Space heating support possible (500l tank only)

## Accessories:

| Accessory Ref | Description                                                                                                                   |
|---------------|-------------------------------------------------------------------------------------------------------------------------------|
| 165215        | Fill and drain connection - Recommended to be ordered with every thermal store                                                |
| 165070        | Gravity break set - Avoids thermal heat loss from thermal store due to thermo-siphon effect.                                  |
| 164102-RTX    | Solar flow setter - Flow regulating valve with flow indicator (2-16 l/min), for balancing solar flow in cascade installations |
| 165113        | Secondary circulation kit - connection for secondary hot water connections                                                    |
| EKBH3S        | 3kW immersion heater for thermal store                                                                                        |

| Accessory Ref | Description                                                                                              |
|---------------|----------------------------------------------------------------------------------------------------------|
| EKEPHYHT35H   | 300l thermal store connection kit (R-32 Hybrid)                                                          |
| EKEPRHLT3HX   | 300l Thermal store connection kit - Heating only & Reversible (R-32 H HT, H-Split, R-Split and Monobloc) |
| EKEPRHLT5H    | 500l Thermal store connection kit - Heating only (R-32 H HT, H-Split, R-Split and Monobloc)              |
| EKEPRHLT5X    | 500l Thermal store connection kit - Reversible (R-32 H HT, H-Split, R-Split and Monobloc)                |
| EKEPHT3H      | 300L Thermal Store connection kit (R410 Hybrid/HT R-Split)                                               |
| EKEPHT5H      | 500L Thermal Store connection kit (R410 HT R-Split)                                                      |



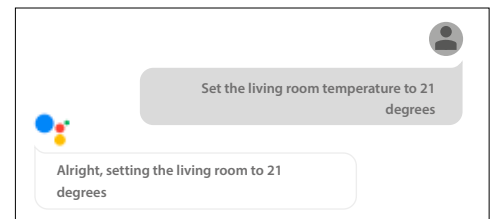
# Onecta App

The Onecta App helps you give customers full control of their heating system from their smartphone – ideal for busy lifestyles and remote management.

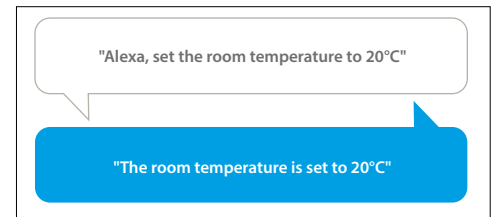


## onecta Voice control

Set up voice control to give customers hands-free operation. This quick-access feature reduces clicks and speeds up control of units. Compatible with Google Assistant and Amazon Alexa for extra convenience.



Example of using the voice control via Google Assistant



Example of using the voice control via Amazon Alexa



## Schedule

Set up a programme for your customer showing when the system should operate, with up to six actions per day.

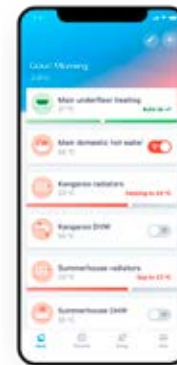
- ✓ Pre-set room temperature and operation mode for consistent comfort.
- ✓ Enable holiday mode to help them save on running costs.



## Monitor

Give your customer a clear overview of how their system is performing and how much energy it uses.

- ✓ Check heating system status remotely for reassurance and troubleshooting.
- ✓ View energy consumption graphs (day, week, month) to optimise efficiency.



## Control

Configure the system to match your customer's comfort needs all year round.

- ✓ Adjust room and domestic hot water temperatures.
- ✓ Activate powerful mode for a quick boost in hot water production.

Scan the QR code to  
download the app now



Function availability depends on the system type, configuration and operation mode.

The app functionality is only available if both the Daikin system and the app have a reliable internet connection.



## User-friendly wired remote controller with premium design

Madoka



**Black**  
RAL 9005 (matt)  
BRC1HHDK



**White**  
RAL9003 (glossy)  
BRC1HHDW



**Silver**  
RAL 9006 (metallic)  
BRC1HHDS

## Madoka combines refinement and simplicity

- › Sleek and elegant design
- › Intuitive touch-button control
- › Three colours to match any interior
- › Compact: measures only 85 x 85 mm

## Easy update via Bluetooth

We strongly recommend that you ensure the user interface is up to date. To update the software or check if updates are available, all you need is a mobile device and the Madoka Assistant app. The app is available on Google Play and in the App Store.



## Award-winning design

Madoka received an IF Design Award and Reddot Product Design Award for its innovative design. These awards represent two of the most prestigious and largest design competitions in the world.



reddot award 2018  
winner



## MMI

Inspired from the design awarded Daikin Altherma third-generation interface of indoor units, this new controller gathers all benefits:

✓ Quick to configure

Log in and you'll be able to completely configure the unit via the new interface in less than 10 steps. You can even check if the unit is ready for use by running test cycles.

✓ Easy operation

Work quickly with the new interface. It's simple to use with just a few buttons and two navigational knobs.



✓ Beautiful design

The interface was designed to be very intuitive. The high contrasted colour screen delivers stunning and practical visuals that really help you as installer or service engineer.

✓ WLAN cartridge connection

Install the BRP069A78 WLAN adaptor in the MMI will make the heat pump wi-fi enabled. You can then connect the heat pump to ONECTA for smart phone control.

✓ Discreet thanks to small dimensions  
H x W x D 136 x 160 x 37 mm



# Stand By Me

A complete customer  
after-care solution

## Supporting tools

With your customer's new Daikin installation and Stand By Me warranty and maintenance options, you can rest assured they are benefiting from the best comfort, energy efficiency, usability and service available on the market. Stand By Me provides an easy way to hand over the system to your customer. Simply complete the commissioning details on [standbyme.daikin.co.uk](http://standbyme.daikin.co.uk), add your customer's email address and they will receive a code so they can create an account on Stand By Me and select their warranty and maintenance options.

### ✓ Installation database

**Stand By Me** provides a live dashboard of your project leads and, once the system is commissioned, your existing installations. So you can review and manage which products were installed, where and when.

### ✓ Easy commissioning

Handover couldn't be simpler either. Simply complete the commissioning details, add your customer's email address and they will receive a code so they can create an account on **Stand By Me** and select their warranty and maintenance options.

### ✓ End-user warranty registration

Warranty registration (previously on KEY) is now all done on **Stand By Me**. Once you've commissioned the system and emailed the code to your customer, your database will show you if the end-user has completed the warranty registration and the length of time remaining on their warranty.

### ✓ Annual maintenance records

**Stand By Me** provides an easy way to review the annual maintenance schedules for each site and track any repairs carried out.

### ✓ E-care

**Daikin e-Care** is a mobile and web app for installers, giving fast access to installation, configuration and diagnostics. Register units, adjust settings and troubleshoot issues quickly, all from your device, saving time on site and improving service efficiency.

### ✓ Daikin Cloud Service

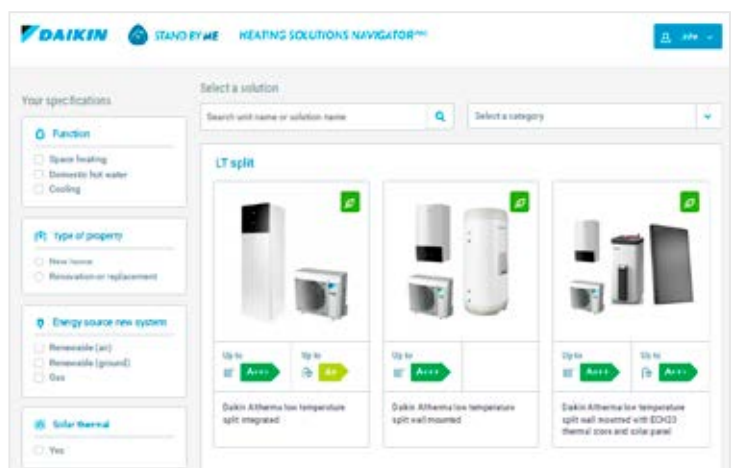
**Daikin DCS** is an online platform giving installers remote access to heat pump settings, energy usage, and error codes. Diagnose issues, adjust controls, and optimise efficiency without site visits. Saving time, improving first-time fix rates, and delivering faster, more professional service

# Heating Solutions Navigator

The Heating Solutions Navigator is a versatile toolkit on Stand By Me, which brings together all the tools required to complete the design and selection of a system and allows you to showcase Daikin heating solutions to your customers.

The Heating Solutions Navigator helps you to:

- › Quickly see the wide array of Daikin Heating Solutions available
- › Check all the options specifically for your installation
- › Link easily to the installation specific literature
- › Estimate the required heat load – from a simple snapshot to a detailed room-by-room calculation
- › Create custom made piping and wiring diagrams
- › Use the flue gas selection tool for gas based solutions
- › Set the configuration of your installation
- › Compare economic and environmental benefits of the Daikin system versus a conventional heating installation
- › Store all your leads on your Stand By Me account
- › Track projects from lead, installation and commissioning to inviting your customers to select after-sales services
- › Request a quotation for DUCO Residential Ventilation System





[daikin.co.uk](https://daikin.co.uk)

National Heating Installer Hub: 01932 879070

Daikin Customer Contact Centre: 01932 879271

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